

PERFORMANCE AUDIT HIGHLIGHTS

February 1998

AUDIT OF THE GULICK AVENUE RELIEF SEWER PROJECT DEPARTMENT OF WASTEWATER MANAGEMENT

Findings

The Gulick Avenue sewer line, which serves Kalihi Valley, was begun in 1990 by what is now the Department of Wastewater Management to remedy the sewer line's inadequate capacity. The Gulick project is nearing the end of the design phase; construction is to be completed in Year 2001.

We found that while the department has recently made significant improvements in the way it manages projects, there are a number of areas where the department's management of the Gulick Avenue sewer project, and its management of capital projects in general, could be improved:

- (1) Following approval of the original budget, the scope of the project increased significantly in size, complexity, and cost. A project that initially was to relieve 1,800 feet of sewer line at cost of \$1.1 million now is expected to require 8,800 feet of sewer line work and construction of a new bridge at a cost in excess of \$11 million.
- (2) Construction funding for the project was requested without an adequate understanding of the work to be performed. No visual inspection or other detailed assessment of the Gulick Avenue sewer line was performed prior to obtaining the initial construction funding.
- (3) To date, funds for project construction have twice been requested, appropriated, and allowed to lapse. Over \$2 million has lapsed so far. It appears that the appropriations lapsed because they were prematurely requested.
- (4) The department did not keep track of all of the project appropriations and expenditures that were made since the project's inception.
- (5) Although changes in project engineers assigned to oversee capital projects are foreseeable, there are no written guidelines defining the responsibilities of project engineers. Given the number of times a capital project may change hands among project engineers during the life of the project, it would be prudent for the department to clearly set forth the roles and responsibilities of project engineers in writing.

The Gulick Avenue project has had four different project engineers since the project's inception, and it will be turned over to a fifth engineer when the project moves into the construction phase.

- (6) Project files are disorganized and incomplete. The department was unable to produce any records documenting why the Gulick Avenue project was initiated, how the project's initial scope was identified, how the project's initial budget was estimated, or why certain project appropriations were allowed to lapse.
- (7) There are no departmental guidelines governing the organization and content of project files. There are no guidelines as to what types of records should be included in the file, nor any guidelines specifically assigning the responsibility to maintain the file.

Recommendations and Response

The department needs to review and revise its capital budgeting process to more accurately determine the scope of work and cost of a proposed project before including construction funding for it in the capital program and budget. When a general problem with a part of the wastewater system is first identified, we suggest that the next appropriate step is to conduct a reconnaissance study, not to request funds to construct an undefined project. The study would specify the nature and extent of the problem identified, develop a detailed assessment of field conditions at the proposed project site(s), and identify remedial alternatives and their associated costs. Until the results of such a study have been obtained, budget requests to design and construct proposed projects should be deferred.

We also recommend that the department develop written guidelines governing the responsibilities of project engineers and the organization and content of project files.

The Department of Wastewater Management generally agreed with the recommendations made in this report. It also provided a number of other comments to which we responded. A few clarifications were made to the draft report in response to the department's comments.